

FIG. 1

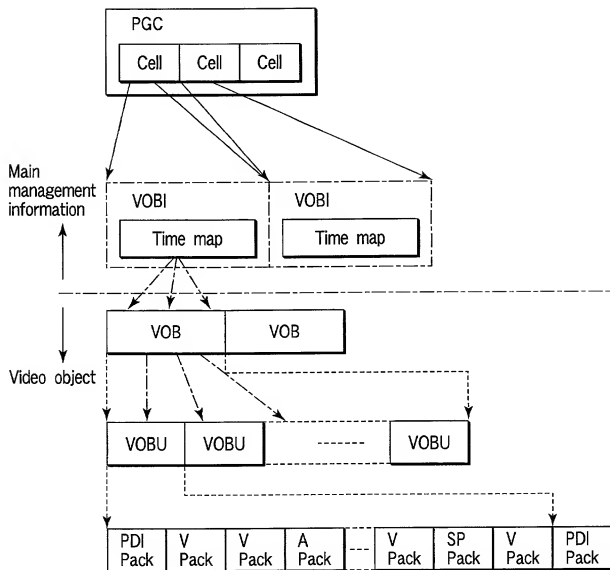


FIG. 2

FIG. 3A

| | |
|---------|--|
| RDI_GI | Real time data and general information |
| DCI_CCI | Display control information and copy control information |
| MNFI | Manufacturer information |

FIG. 3B

| | |
|-------------|------------------------------|
| Reserved | |
| VOBU_S_RTM | VOBU presentation start time |
| Reserved | |
| VOBU_REC_TM | VOBU recording time |

FIG. 3C

| DCI : display control information | | | |
|-----------------------------------|-----------------------|----------------|------------------------|
| Aspect ratio 4b | Subtitling mode 2b | Reserved 1b | Film camera mode 1b |

FIG. 3D

| CCI : copy control information | | | |
|--------------------------------|-------------|--------------|----------------|
| CGMS 2b | APSTB 2b | Source 1b | Reserved 3b |

The diagram illustrates the structure of a Packetized Elementary Stream (PES) packet. It is divided into two main parts: a detailed view of the packet fields and an overall structure diagram.

Packet Fields (Detailed View):

- Packet start code
- Stream ID
- PES packet length
- PES scrambling control
- Copyright
- Original or copy
- Various information including presentation time, etc.
- Video, audio or sub picture data

Overall Structure:

The packet is composed of the following fields:

- Pack header
- Packet header
- Video, audio or sub video data
- Padding

Arrows indicate the boundaries of the **Packet** (from the start of the Packet header to the end of the Video, audio or sub video data) and the **Pack** (from the start of the Pack header to the end of the Padding).

FIG. 4

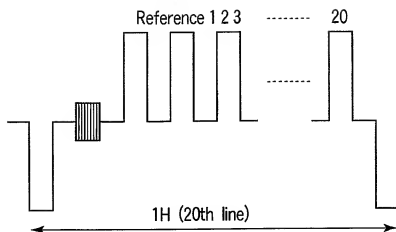


FIG. 5A

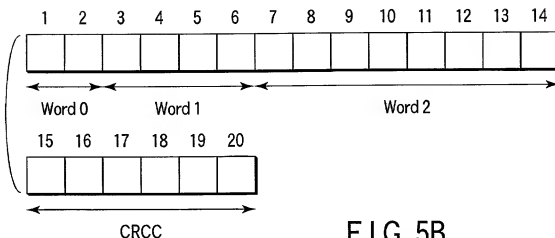


FIG. 5B

| CGMS 7,8 | Definition | Recording rule |
|-------------|--|--|
| 0,0 | Copying authorized unconditionally | CGMS of recording medium is recorded as (0, 0) |
| 0,1 | Not in use | ... |
| 1,0 | Copying authorized in a generation | CGMS of recording medium is recorded as (1, 1) |
| 1,1 | Copying prohibited | Nothing is recorded |

FIG. 5C

| Word 0 | Definition |
|-----------|--|
| 0,0 | No signal and information for image with aspect ratio of 4:3 |
| 0,1 | Squeeze signal for image with aspect ratio of 16:9 |
| 1,0 | Letter box signal with aspect ratio of 14:3 |
| 1,1 | Not in use at the moment |

FIG. 5D

```
graph TD
    Start([Start]) --> B1[B1: Detect contents of word 0 of TV signal]
    B1 --> B2{B2: 00 ?}
    B2 -- YES --> B6[B6: Confirm RDI pack header]
    B2 -- NO --> B3{B3: 01 ?}
    B3 -- YES --> B6
    B3 -- NO --> B4{B4: 10 ?}
    B4 -- YES --> B6
    B4 -- NO --> B5{B5: 11 ?}
    B5 -- YES --> B6
    B5 -- NO --> End([End])
    B6 --> B7{B7: RDI pack header generated ?}
    B7 -- YES --> B8[B8: Determine RDI_CCI  
00→0000  
10→0001  
01→0000]
    B7 -- NO --> B6
    B8 --> B9[B9: Coordinate aspect ratio information of sequence header until generation of next RDI pack header]
    B9 --> B6
```

The flowchart illustrates the process of generating an RDI pack header. It begins with a 'Start' terminal, leading to block B1: 'Detect contents of word 0 of TV signal'. This leads to a series of decision diamonds: B2 '00 ?', B3 '01 ?', B4 '10 ?', and B5 '11 ?'. If any of these decisions is 'YES', the flow proceeds to block B6: 'Confirm RDI pack header'. If all are 'NO', the process ends. From B6, the flow goes to decision B7: 'RDI pack header generated ?'. If 'YES', it proceeds to block B8: 'Determine RDI_CCI', which contains a mapping: 00→0000, 10→0001, and 01→0000. If 'NO', it loops back to B6. From B8, the flow goes to block B9: 'Coordinate aspect ratio information of sequence header until generation of next RDI pack header', which contains a mapping: 00→0000, 10→0001, and 01→0000. From B9, the flow loops back to B6.

FIG. 6

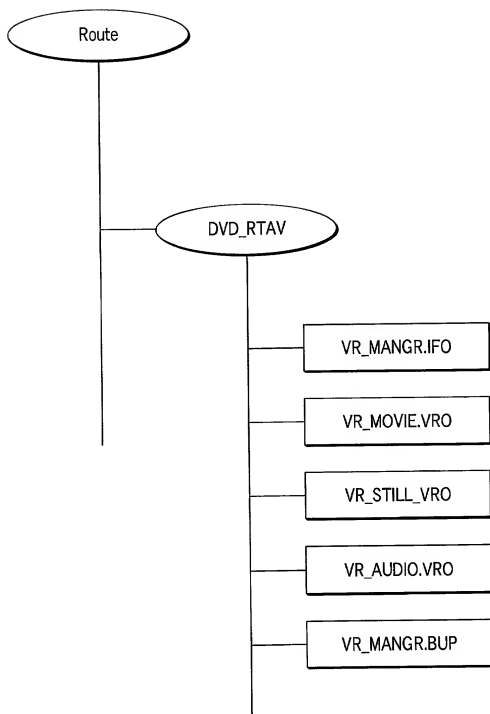


FIG. 8

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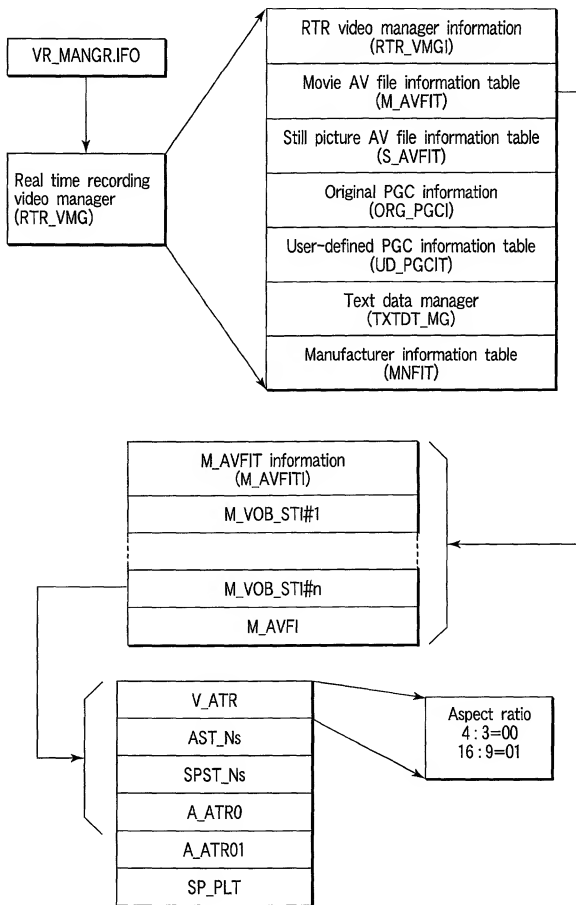


FIG. 9

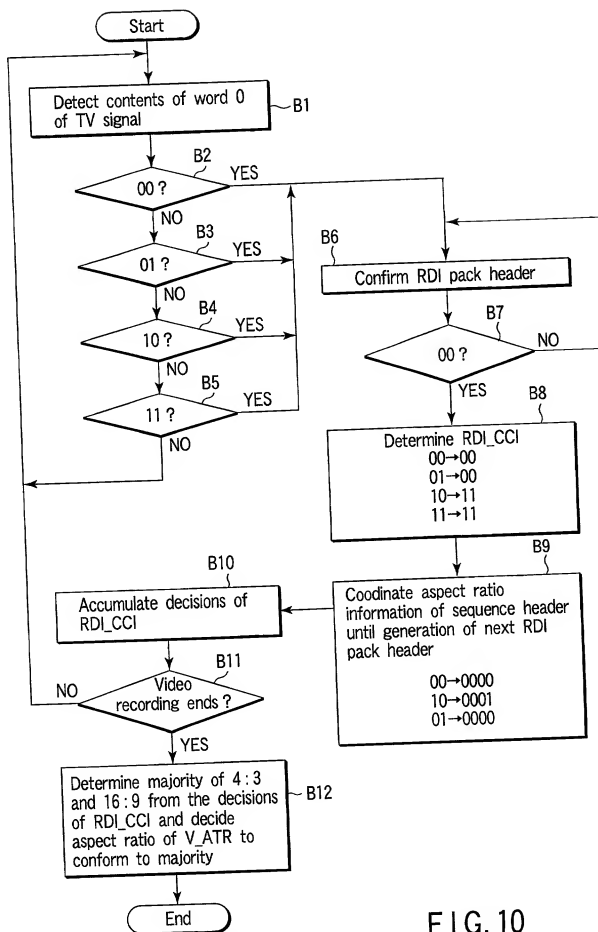


FIG. 10